

REMARKS

The following remarks are being submitted as a full and complete response to the Office Action dated January 22, 2010 (U.S. Patent Office Paper No. 20100102). In view of the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

As outlined above, claims 4, 8, and 20-25 stand for consideration in this application. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Prior Art Rejections

The Examiner rejected claims 4, 20, 21, 23, and 25 under 35 U.S.C. §103(a) as being unpatentable over Norcott (U.S. Patent No. 6,775,518) in view of Knutson (U.S. Patent No. 7,050,753), and in further view of Morton (U.S. Patent Application Pub. No. 2005/216443). The Examiner rejected claims 8, 22 and 24 under 35 U.S.C. §103(a) as being unpatentable over Norcott in view of Knutson, and in further view of Morton and Remschel (U.S. Patent No. 6,411,796). Applicants have reviewed the above-noted rejections, and hereby respectfully traverse.

A proper obviousness rejection that relies on a combination of prior art elements requires establishing that the prior art references, when combined, teach or suggest all of the claim limitations. MPEP §2143. Furthermore, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385 (C.C.P.A. 1970). That is, to render a claim obvious under 35 U.S.C. §103, a determination must be made that the claimed invention “as a whole” would have been obvious to person of ordinary skill in the art when the invention was unknown and just before it was made. MPEP §2142.

As outlined above, claims 4, 8, and 20-25 remain of record. Accordingly, Applicants respectfully submit that Norcott, either alone or in combination with Knutson, Morton, and/or Remschel, fails to teach, suggest, or disclose each and every limitation of claims 4, 8, and 20-25. For example, none of the cited references teach or suggest “a **matcher section to link** said lecture-related information with said lecture contents **based on said analysis results**” as required by independent claim 4. The Examiner states on page 3 of the Office Action that

Norcott discloses this limitation in column 6, lines 5-10 and 26-46. Applicants respectfully disagree.

In contrast to claim 4, Norcott simply describes that “[a]n educational system simultaneously provides educational materials to multiple users” (abstract) and “re-presents relevant portions of the educational materials to that user when that user fails to demonstrate adequate comprehension of the educational materials” (col. 9, ll. 9-11), and that the system includes a program memory 24 that “stores programs of educational materials, and accesses the content media storage 26 and content selection database 28 for data relevant to the programs of educational materials in program memory 24.” (Col. 3, ll. 14-16). Norcott further explains that, during certain aspects of a retention assessment or test, “a presentation segment review 114 is activated, whereupon the content media storage 26 and content selection database 28 are prompted to represent the materials (content) that are relevant to the incorrectly answered question.” (Col. 6, ll. 40-45) (emphasis added). That is, Norcott merely provides data that is relevant to educational programs can be accessed through a content media storage 26 and content selection database 28 that are implemented to represent the materials that are relevant to the data. Norcott does not teach or suggest any form of a matcher that performs an operation of linking any items based on an analysis of the items being linked, as required by claim 4. Rather, in Norcott, the data and the educational programs have pre-determined relevance relationships that have already been implemented within the content media storage 26 and content selection database 28. Norcott merely describes operations accessing data and prompting representation of educational materials based on these pre-determined relevance relationships – Norcott does not describes any operations of linking any items as required by claim 4, nor any analysis of items upon which a linking operation could be based, as also required by claim 4.

A program memory that simply accesses and prompts for representations of educational programs based on pre-determined relevance relationships with other data, as described in Norcott, is clearly not a matcher section that is implemented to actually link lecture-related information with lecture contents based on results of analyzing the lecture-related information and the lecture contents, as required by claim 4. Likewise, Remschel fails to include any mention or suggestion of any “matcher section to link said lecture-related information with said lecture contents based on said analysis results,” as required by claim 4. Moreover, Knutson simply describes a system that performs an Internet search “**with regard to a particular subject, subject area and/or topic, and catalogues and/or categorizes the**

content and/or the content attributes of particular web pages for possible presentation as learning material, **depending on whether the categorized/catalogued content and/or content attributes correlate** to...the various learning proclivities and/or particular learning preferences that may make up a user's learning profile.” (Col. 4, ll. 10-26) (emphasis added). A system that merely **performs an Internet search for content that has an existing relationship to a particular subject and categorizes the returned content** based on a correspondence between the content and a learning profile, as described in Knutson, is clearly not a matcher section that is implemented to actually link lecture-related information with lecture contents based on results of analyzing the lecture-related information and the lecture contents, as required by claim 4.

Moreover, Morton merely describes a “system for **indexing, searching, and retrieving information** from timed media files [that]...based upon relevance intervals so **that a portion of a timed media file is returned**, which is selected specifically to be relevant to the given information representations.” (Abstract) (emphasis added). Morton further explains that “relevance intervals” are “portions of timed media files” (para. [0024]) and that “information representations” are “based on user queries and **material related, directly and via ontologies**, to such entries.” (Para. [0036]) (emphasis added). That is, Morton simply explains that a system manages timed media files by performing indexing, searching, and retrieving information individually for each of the timed media files according to the relevance of portions of that individual timed media file to an inputted user search query. Morton does not describes any form of matching section that links a first item to a separate, second item based on an analysis of the two separate items.

With regard to indexing and searching information from an individual timed media file based on relevance intervals, Morton explains that the system “the system then extracts data from the timed media file and the associated data [that is associated with the timed media file]....The extracted data is then analyzed in step 24 using natural language processing, conceptual reasoning, logical structure analysis, and other techniques. **The results of the analysis are saved in a raw data index in step 26, so that users can access the raw data for highly accurate multi-information representation queries and for the creation of customized or updated search indices at a later date....**In step 28, **relevance intervals and their associated magnitudes of relevance are calculated for each information representation**, and the relevance intervals and the corresponding magnitudes of relevance are stored in the search index in step 30.” (Para. [0059]) (emphasis added). The

is, Morton merely describes a system that analyzes timed media files individually to obtain an index of raw data extracted from the file and, in response to users queries (consisting of search terms input by a user, as Morton explains in paragraph [0061]), determines portions of that individual media file that are relevant to the user search query according to the raw data index for the file. Morton does not include any mention or suggestion of any operations of linking the timed media files to any other related information based on an analysis of the timed media files and the related information. A system that analyzes a timed media file to obtain an index of raw data for the file and accesses this index to select and return portions of the file relevant to a user search query, as described Morton, is clearly not a matcher section that operates to link lecture-related information with lecture contents based on results of analyzing the lecture-related information and the lecture contents, as required by claim 4.

Accordingly, Norcott, either alone or in combination with Knutson, Morton, and/or Remschel, fails to teach, suggest, or disclose “a matcher section to link said lecture-related information with said lecture contents based on said analysis results” as required by claim 4. For this reason alone, claim 4 is patentable over the cited references.

As another example, for at least reasons similar to those already discussed above, none of the cited references teach or suggest that “said matcher section links said video information with said lecture-related information based on results from comparing with said extracted text information” required by claim 4. As discussed above, none of the cited references teach or suggest any form of matcher section that links lecture contents and lecture-related information. It logically follows from this that none of the cited references include any teaching or suggestion any form of linking video information contained in the lecture contents with said lecture-related information by comparing text information extracted from the video contents with text information extracted from the lecture-related information, as required by claim 4. While the Examiner states on page 4 of the Office Action that Morton describes that “search terms are extracted from the audio and video, and the time segments of the spoken sentences and also the video with the relevant terms are collated on a time axis,” Morton simply describes, in paragraphs [0197-98], that the raw data index for an individual timed media file is utilized to locate relevance intervals of the timed media file to return in response a user search query based on how visual information of the time media file is identified in the parts of the raw data index that describes the timed media file that are relevant to the search query. A system that identifies visual information in a timed media file relevant to a search query based on a raw data index of that timed media file, as described in

Morton, is clearly not any matcher section that links video information contained in the lecture contents with said lecture-related information by comparing text information extracted from the video contents with text information extracted from the lecture-related information, as required by claim 4. For this reason alone, claim 4 is patentable over the cited references.

As yet another example, none of the cited references teach or suggest that “said matcher section is configured to extract words from said extracted text information, **extract time information on word locations where specified words frequently appear in said extracted text information**,...and store said extracted time information, said extracted video information and said extracted audio information in a relationship collating to each other on a time axis in time-spans during each of which the specified words frequently appear in said extracted text information” as required by claim 4. The Examiner appears to assert that Morton discloses this limitation in paragraphs [0078], [0189]-[0190], and [0197]-[0198] on page 4 of the Office Action. In contrast to claim 4, however, Morton describes that “[r]eferring to Fig. 8, **sample inputs and outputs of the relevance interval calculations of the system of the present invention are described. The Input column on the left represents the raw data index 114 inputted to the relevance interval calculations, and the Output column on the right represents the search index 120 produced...**The input is the raw data index that includes...includes each information representation that is located within the timed media file, the time-code location of the occurrence of each information representation, groupings of such information representations (either sentences or visual objects), and logical or grammatical relationships between information representations and information representation groupings.” (Para. [0078]) (emphasis added).

That is, Morton describes that a raw data index lists time locations in a timed media file that are related to information topics identified by the “indexing terms” used by the index, that specific time locations in the media file are identified for a user search query by comparing the query terms with the indexing terms, and that these time locations are used to return portions of the timed media file in response to the user search query. Identifying time information for **portions of a timed media file that are related to an indexing term**, as described in Morton, is clearly not extracting time information on word locations **where specified words frequently appear in extracted text information from audio and video information**, as required by claim 4. Moreover, returning portions of a timed media file identified as relating to indexing terms that correspond to a user search query, is clearly not storing extracted time, video, and audio information in a relationship collating to each other

on a time axis **in time-spans during each of which the specified words frequently appear in said extracted text information**, as required by claim 4. Likewise, each of Knutson, Morton, and Remschel fails to include any mention or suggestion that that “said matcher section is configured to extract words from said extracted text information, extract time information on word locations where specified words frequently appear in said extracted text information,...and store said extracted time information, said extracted video information and said extracted audio information in a relationship collating to each other on a time axis in time-spans during each of which the specified words frequently appear in said extracted text information” as required by claim 4. For this reason alone, claim 4 is patentable over the cited references.

For at least these reasons, Applicants respectfully submit that Norcott, either alone or in combination with Knutson, Morton, and/or Remschel, fails to teach, disclose, or suggest each and every limitation of claim 4 and, therefore, that claim 4 is now in condition for allowance. For at least similar reasons to those discussed above with reference to claim 4, Applicants respectfully submit that Norcott, either alone or in combination with Knutson, Morton, and/or Remschel, fails to teach, disclose, or suggest any of the following similar limitations required by independent claim 21: “a matcher section to link said lecture-related information with said lecture contents based on said analysis results”; that “said matcher section links said video information with said lecture-related information based on results from comparing with said extracted text information”; and that “said matcher section is configured to extract words from said extracted text information extract time information on word locations where specified words frequently appear in said extracted text information extract said video information corresponding to said specified words in each sentence with said time information, and extract said audio information corresponding to said specified words in each sentence with said time information.” Moreover, for at least similar reasons to those discussed above with reference to claim 4, Applicants respectfully submit that Norcott, either alone or in combination with Knutson, Morton, and/or Remschel, fails to teach, disclose, or suggest any of the following similar limitations required by independent claim 23: “a matcher section to link said lecture-related information with said lecture contents based on said analysis results”; that “said matcher section links said video information with said lecture-related information based on results from comparing with said extracted text information”; and that “said matcher section is configured to extract words from said extracted text information, extract time information on word locations where specified words

frequently appear in said extracted text information,...and store said extracted time information, said extracted video information and said extracted audio information in a relationship collating to each other on a time axis in time-spans during each of which the specified words frequently appear in said extracted text information.” Therefore, claims 21 and 23 are also now in condition for allowance.

Where an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 5 U.P.S.Q.2d 1596, 1598 (Fed. Cir. 1988). Because claims 8 and 20, claim 22, and claims 24 and 25 depend either directly or indirectly from claims 4, 21, and 23 respectively, Applicants respectfully submit that Norcott, either alone or in combination with Knutson, Morton, and/or Remschel, does not render obvious claims 8 and 20, claim 22, and claims 24 and 25 for at least the reasons set forth above that it does not render obvious claims 4, 21, and 23 respectively and, therefore, that claims 8, 20, 22, 24, and 25 are also now in condition for allowance.

Therefore, Applicants respectfully submit that the present invention as claimed is distinguishable and thereby allowable over the prior art of record.

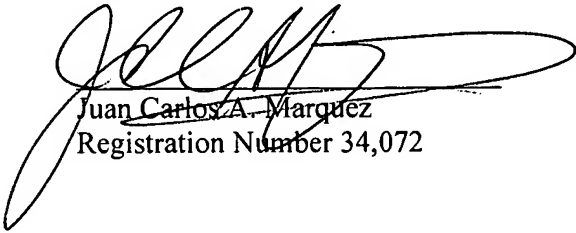
Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

Nicholas B. Trenkle
Registration Number 54,500



Juan Carlos A. Marquez
Registration Number 34,072

STITES & HARBISON PLLC
1199 North Fairfax Street
Suite 900
Alexandria, VA 22314-1437
(703) 739-4900 Voice
(703) 739-9577 Fax
Customer No. 38327

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